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| 10/564,569 | 01/13/2006 | Charles William Worrell | PU030205 | 9621 |

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| EXAMINER |
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CROWDHURY, NIGAR

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2621

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11/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,569

Applicant(s)

WORRELL ET AL.

Examiner

NIGAR CHOWDHURY

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date 09/09/2009
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 06/25/2009 have been fully considered but they are not persuasive.
2. In re pages 6-7, applicant argues that Van Gestel discloses the recording arrangement comprises an input terminal 11 for receiving the MPEG serial datastream for recording transport packets included in the datastream in the signal blocks of the track portions TP3' of the tracks. Van Gestel fails to disclose sub-channels of multiplexed streams stored on the digital storage medium, as recited in claims 1 and 9.

In response, the examiner respectfully disagrees. Van Gestel discloses from col. 12 lines 11-30 that "...the error connection unit....is coupled to an input of a 'normal play' processing unit.....a 'trick play' processing unit...are coupled to corresponding terminals a and b respectively of a switch.....in the absence of the 'trick play' processing unit....the switch...will be absent.....switched into a 'normal play' reproduction mode.....the record carrier is transported at a nominal speed....". Van Gestel also discloses from col. 19 lines 46-col. 20 lines 19 that "...a trick mode, only I-frame information can be used to regenerate a video signal, as retrieving not only the I-frame information but also the corresponding P-frame informationin order to obtain the 'trick play' information, only the information stored in I-frames included in the serial MPEG datastream is extracted and used as 'trick play' data....a number of signal blocks are inserted that comprise the 'trick play' information. Fig. 17 shows the sequence of signal blocks in the track....trick play area....the track now comprise an indication that

the signal blocks comprise trick mode information.....signal blocks stored in the track prior to the trick play area....as well as the signal blocks stored in the track after the trick play area...comprise information indication that the information stored in the signal blocks is normal play information....." Van Gestel discloses normal play mode and trick play mode. The signal blocks stored in the track prior to the trick play area, the signal blocks stored in the track after the trick play area comprise information indicating that the information stored in the signal blocks is normal play information. In trick play mode, only I-frame information can be used to regenerate a video signal and storing the trick play information in signal blocks that are specifically meant for storing the trick play information in a specific location in a track and for inserting the indication information indicating that the signal block is a signal block in which trick mode information is stored in the third block section of those signal blocks. The normal play processing unit be capable of storing the indication information indicating that the signal blocks generated by the unit comprise normal play information, in the third block sections of those signal blocks. Therefore, Van Gestel meets the limitation of sub-channel which is broadly can interpret by the I-frames included in the serial MPEG datastream is extracted and used as trick play data.

3. In re pages 8-9, applicant argues that Van Gestel fails to discloses the newly added claims 15 and 16 "wherein the multiplexed streams relate to at least a primary program and at least one other program different from the primary program, the primary program corresponding to a primary channel, and the at least one other program corresponding to the particular sub-channel."

In response, the examiner respectfully disagrees. In addition to paragraph 2, Van Gestel further discloses a primary program corresponding to the primary channel which is normal play information of signal block indicated by 'N', and one other program corresponding to the particular sub-channel which is trick play information of a signal block indicated by 'T' are different from each other.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 6-7, 8-9, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,579,183 by Van Gestel et al.
5. Regarding **claim 1**, a method for providing trick mode operations for sub-channels of multiplexed streams stored by a digital storage medium, comprising the steps of:
 - receiving at the recording device, a trick mode command directed to a particular sub-channel (I-frame) of a multiplexed stream (fig. 5-6, col. 12 lines 11-30);

- identifying frame data stored by the digital storage medium corresponding to the particular sub-channel (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19); and
- extracting, from the frame data, trick mode data for the particular sub-channel (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19).

6. Regarding **claim 3**, the method further comprising the step of outputting the trick mode data for the particular sub-channel to a display device for display thereby (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19).

7. Regarding **claim 6**, the method wherein the multiplexed stream is a Moving Picture Experts Group (MPEG) transport stream (See Abstract).

8. Regarding **claim 7**, the method wherein the particular sub-channel of the multiplexed stream is specified as an operand in the trick mode command (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19).

9. Regarding **claim 8**, the method wherein at least one of a plurality of trick mode operations to be applied to the particular sub-channel is specified as another operand in the trick mode command (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19).

10. **Claim 9** is rejected for the same reason as discussed in the corresponding claim 1 above.

11. **Claim 12** is rejected for the same reason as discussed in the corresponding claim 6 above.

12. **Claim 13** is rejected for the same reason as discussed in the corresponding claim 7 above.

13. **Claim 14** is rejected for the same reason as discussed in the corresponding claim 8 above.

14. Regarding **claim 15**, the method wherein the multiplexed streams relate to at least a primary program and at least one other program different from the primary program, the primary program corresponding to a primary channel, and the at least one other program corresponding to the particular sub-channel (fig. 5-6, col. 12 lines 11-30, col. 19 lines 46-col. 20 lines 19, a primary program corresponding to the primary channel which is normal play information of signal block indicated by 'N', and one other program corresponding to the particular sub-channel which is trick play information of a signal block indicated by 'T' are different from each other)

15. **Claim 16** is rejected for the same reason as discussed in the corresponding claim 15 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,579,183 by Van Gestel et al. in view of US 7,106,749 by Darshan et al.

17. Regarding **claim 2**, Van Gestel discloses the frame data comprises Intra-coded frames for the particular sub-channel but fails to disclose the method wherein the frame data comprises complete Intra-coded frames (I-frames) for the particular sub-channel.

Darshan discloses the method wherein the frame data comprises complete Intra-coded frames (I-frames) for the particular sub-channel (col. 9 lines 14-26).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Van Gestel's system to include a complete I-frame, as taught by Darshan, for the advantage of providing an easy trick play mode.

18. **Claim 10** is rejected for the same reason as discussed in the corresponding claim 2 above.

19. Claims 4-5, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,579,183 by Van Gestel et al.

20. Regarding **claim 4**, Van Gestel discloses the frame data comprises Intra-coded frames for the particular sub-channel but fails to disclose the method wherein receiving step sending step is performed in response to a user selecting the trick mode command via a remote control device.

It is noted that the use of remote control is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known remote control to operate different function which will be convenient for a user while watching.

21. Regarding **claim 5**, Van Gestel discloses the frame data comprises Intra-coded frames for the particular sub-channel but fails to disclose the method wherein the digital storage medium is Institute of Electrical & Electronics Engineers 1394 (IEEE-1394) compliant.

It is noted that the use of IEEE is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known IEEE for having reliable and secure network.

22. **Claim 11** is rejected for the same reason as discussed in the corresponding claim 5 above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
11/05/2009

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621